

Remarks

Applicant submits this Preliminary Amendment prior to examination of the application to clean up the specification. No new matter has been added.

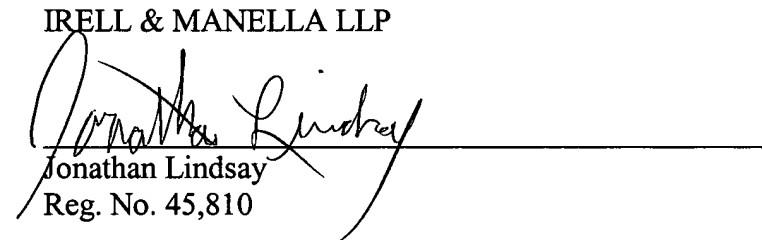
Conclusion

Applicant respectfully requests examination of the pending application at the earliest possible time.

Respectfully submitted,

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CERTIFICATE OF MAILING

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop NON FEE AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA, 22313-1450 on: May 16, 2003.



Wendy Jones 5/16/03

Date

APPENDIX A

Version with markings to show changes made to the specification

Marked up amended paragraph beginning on page 1, line 7 and ending on page 1, line 21:

-- Transmitter-receiver controller systems are widely used for remote control and/or actuation of devices or appliances such as garage door openers, gate openers, and security systems. [Due to the advent of the "code grabber" and other means of compromising such security systems, most conventional security systems employ rolling code technology.] Rather than transmitting a single code N to operate the receiver, rolling code technology is based on the idea that the recognized operating code of the security system changes each time an operating code is provided. The activation code is altered each time in both the transmitter and the receiver according to a rolling code algorithm, which produces a specific number of possible code combinations. In most cases, the transmitter and receiver of a rolling code system both contain a synchronized code generator that calculates a new operating code each time a code is provided and/or received. Thus, the operating code combination N of the system changes to code combination N+1 after code N is used, then code N+1 changes to code combination N+2 and so on.--

Marked up amended paragraph beginning on page 10, line 11 and ending on page 11, line 12:

--Figure 2 is a flow diagram illustrating an exemplary process 200 for determining a set of codes for controlling a rolling code receiver, according to one embodiment. Referring to Figure 2, process 200 begins at decision block 205 where a determination is made as to whether or not a rolling code receiver follows a forward window model. This may be accomplished, for example, by either knowing the type of receiver or through experimentation. If the rolling code receiver follows a forward window model, then the size(s) of the one or more forward windows are determined at block 210. This may be accomplished by sequentially [capturing] detecting codes transmitted from a subject rolling

code transmitter to a corresponding rolling code receiver and observing the receiver's response. In one embodiment, codes may be [captured] detected [using a conventional "code grabber." In another embodiment, codes may be captured] using a computer, coupling output and input ports of the computer to the rolling code transmitter, [and] or utilizing software on the computer to sequentially actuate the transmitter and read each sequentially transmitted code. More specifically, an output signal line or port of a computer (e.g., printer port) is coupled to a control input terminal of a relay (e.g., solid state relay). The output terminals of the relay are coupled across a switch of the rolling code transmitter used to actuate the transmitter. An input signal line or port of the computer is coupled to an output signal line of the rolling code transmitter. A simple software routine, script, etc. may be utilized to sequentially activate the relay (and thus the transmitter) and then read back the corresponding transmitted code via the input port. Since different rolling code transmitters (of the same manufacturer and/or different manufacturers) may have different timing requirements, the software must be configured to account for the different timing requirements. This embodiment facilitates the [capture] reading of many codes of the rolling code transmitter in a short period of time. Other embodiments may be utilized to [capture] read codes.--